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- b) a shaft supported by said baseplate;
- c) a stator assembly comprising
  - i) a core having poles and
  - ii) windings around said poles;
  - iii) the stator core being rigidly attached to said baseplate;
- d) injection molded thermoplastic material substantially encapsulating said windings and contacting the baseplate such that the windings, core and baseplate are rigidly fixed together, said thermoplastic having a modulus of elasticity of at least 1,000,000 psi at 25°C; and
- e) a hub supported on said shaft, said hub having a magnet connected thereto in operable proximity to the stator assembly.

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B3

6. (Amended) The spindle motor of claim 1 wherein the thermoplastic used in the encapsulation has a vibratory dampening ratio of at least 0.05 in the range of 0-500 Hz.

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B4

10. (Amended) A spindle motor comprising:

- a) a baseplate;
- b) a shaft supported by said baseplate;
- c) a stator assembly comprising
  - i) a core having poles and
  - ii) windings around said poles,

the baseplate and stator assembly not being in direct contact with one another but rather the stator assembly being spaced from the baseplate;

- d) a hub supported on said shaft, said hub having a magnet connected thereto in operable proximity to the stator assembly; and
- e) a thermoplastic material secured to the baseplate and substantially encapsulating the stator windings, the thermoplastic material joining the stator assembly to the baseplate in the space between the stator assembly and the baseplate, filling in the space between them such that the windings, core and baseplate are rigidly fixed together.

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21. (Amended) The spindle motor of claim 10 wherein the thermoplastic material has a coefficient of linear thermal expansion of less than  $2 \times 10^{-5}$  in/in °F throughout the range of 0-250°F.

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24. (Amended) The spindle motor of claim 10 wherein the thermoplastic material has a vibration dampening ratio of at least 0.05 in a frequency range of 0-500 Hz and a modulus of elasticity of at least 1,000,000 psi at 25°C.

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59. (New) A spindle motor comprising:  
a) a baseplate;  
b) a shaft supported by said baseplate;  
c) a stator assembly comprising  
i) a core having poles and  
ii) windings around said poles,  
the stator assembly being spaced from the baseplate;  
d) a hub supported on said shaft, said hub having a magnet connected thereto in operable proximity to the stator assembly; and  
e) a thermoplastic material secured to the baseplate and substantially encapsulating the stator windings, the thermoplastic material joining the stator assembly to the baseplate in the space between the stator assembly and the baseplate; wherein the thermoplastic material has a coefficient of linear thermal expansion of less than  $2 \times 10^{-5}$  in/in °F throughout the range of 0-250°F.

60. (New) A spindle motor comprising:  
a) a baseplate;  
b) a shaft supported by said baseplate;  
c) a stator assembly comprising  
i) a core having poles and  
ii) windings around said poles,  
the stator assembly being spaced from the baseplate;  
d) a hub supported on said shaft, said hub having a magnet connected thereto in operable proximity to the stator assembly; and

e) a thermoplastic material secured to the baseplate and substantially encapsulating the stator windings, the thermoplastic material joining the stator assembly to the baseplate in the space between the stator assembly and the baseplate; wherein the baseplate comprises a stiff thermoplastic material, having a modulus of elasticity of at least 1,000,000 psi at 25°C, and a metal plate substantially encapsulated in the stiff thermoplastic material.

61. (New) The spindle motor of claim 60 wherein the stiff thermoplastic material is the same material as is used to encapsulate the windings.

62. (New) A motor comprising:

- B7  
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- a) a baseplate;
  - b) a shaft supported by said baseplate;
  - c) a stator assembly comprising
    - i) a core having poles and
    - ii) windings around said poles;
    - iii) the stator core being rigidly attached to said baseplate;
  - d) injection molded thermoplastic material substantially encapsulating said windings and contacting the baseplate and core such that the windings, core and baseplate are rigidly fixed together, said thermoplastic having a modulus of elasticity of at least 1,000,000 psi at 25°C; and
  - e) a hub supported on said shaft, said hub having a magnet connected thereto in operable proximity to the stator assembly.

63. (New) A motor comprising:

- a) a baseplate;
- b) a shaft supported by said baseplate;
- c) a stator assembly comprising
  - i) a core having poles and
  - ii) windings around said poles,the stator assembly being spaced from the baseplate;
- d) a hub supported on said shaft, said hub having a magnet connected thereto in operable proximity to the stator assembly; and

e) a thermoplastic material secured to the baseplate and substantially encapsulating the stator windings, the thermoplastic material joining the stator assembly to the baseplate in the space between the stator assembly and the baseplate such that the windings, core and baseplate are rigidly fixed together, the stator assembly being connected to the baseplate only through said thermoplastic material.

64. (New) The spindle motor of claim 10 wherein the thermoplastic used in the encapsulation has a vibratory dampening ratio of at least 0.05 in the range of 0-500 Hz.

65. (New) The spindle motor of claim 61 wherein the baseplate and winding encapsulation are formed as one monolithic body.

66. (New) A motor comprising:

- B7  
(cont)
- a) a baseplate;
  - b) a shaft supported by said baseplate;
  - c) a stator assembly comprising
    - i) a core having poles, and
    - ii) windings around said poles;
  - d) a hub supported on said shaft, said hub having a magnet connected thereto in operable proximity to the stator assembly; and
  - e) an injection molded thermoplastic material encapsulating the windings and also locking the stator assembly to the baseplate, the baseplate and stator assembly not being in direct contact with one another but rather having a space between them filled in by the thermoplastic material.

67. (New) The motor of claim 66 wherein the baseplate is made of a thermoplastic material having a modulus of elasticity of at least 1,000,000 psi at 25°C and a metal plate, the metal plate being substantially encapsulated in the thermoplastic material.

68. (New) The motor of claim 67 wherein the thermoplastic material of which the baseplate is made is the same material that encapsulates the windings, and the baseplate and winding encapsulation are formed as one monolithic body.

69. (New) The motor of claim 63 wherein the thermoplastic material has a thermal conductivity of at least 0.7 watts/meter °K at 23°C.

70. (New) The motor of claim 63 wherein the thermoplastic material has a coefficient of linear thermal expansion of less than  $2 \times 10^{-5}$  in/in °F throughout the range of 0-250°F.

71. (New) The motor of claim 63 wherein the thermoplastic material has a vibration dampening ratio of at least 0.05 in a frequency range of 0-500 Hz.

72. (New) The motor of claim 63 wherein the thermoplastic material has a modulus of elasticity of at least 1,000,000 psi at 25°C.

73. (New) The motor of claim 63 wherein the thermoplastic material has a modulus of elasticity of at least 2,000,000 psi at 25°C.

74. (New) A motor comprising:

- a) a baseplate;
- b) a shaft supported by said baseplate;
- c) a stator assembly comprising
  - i) a core having poles, and
  - ii) windings around said poles;
- d) a hub supported on said shaft, said hub having a magnet connected thereto in operable proximity to the stator assembly; and
- e) an injection molded thermoplastic material encapsulating the windings and also locking the stator assembly to the baseplate, the baseplate and winding encapsulation being formed as one monolithic body.

75. (New) The spindle motor of claim 1 wherein the thermoplastic material has a modulus of elasticity of at least 2,000,000 psi at 25°C.

76. (New) The spindle motor of claim 1 wherein the thermoplastic material has a modulus of elasticity of at least 3,000,000 psi at 25°C.

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und

77. (New) The motor of claim 62 wherein the thermoplastic material has a modulus of elasticity of at least 2,000,000 psi at 25°C.

78. (New) The motor of claim 62 wherein the thermoplastic material has a modulus of elasticity of at least 3,000,000 psi at 25°C.

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### REMARKS

The amendment does not involve new matter. The changes to the specification and amended claims from the previous version to the rewritten version are shown in Appendix A, with brackets for deleted matter and underlines for added matter. Claim 1 now includes limitations taken from original claims 2 and 6, and claim 10 now includes limitations taken from original claims 2 and 25. Claim 21 and pages 20-21 were amended to use the term "in/in °F" for the units of the coefficient of linear thermal expansion, in response to paragraph 3 of the Office Action. New claims 59 and 60 are original claims 21 and 28 in independent form with slight modification. New claim 61 is patterned after claim 29. New claims 62-64 are patterned after claims 1, 10 and 6 respectively, and are fully supported by the specification. Claim 65 includes a limitation from original claim 27. Claims 66-68 are patterned after claims 25-27. Claims 69-73 include limitations from claims 21, 22, 24 and 35. Claim 74 is made up of limitations from claims 10, 25 and 27. Claims 75-78 include limitations from original claims 35 and 36.

Applicant does not acquiesce in the arguments presented in the Office Action as to why a restriction requirement was deemed proper by the Examiner. Applicant affirms the oral election (now without traverse) to prosecute the invention of Group I. The claims that were withdrawn from consideration have now been cancelled, making the restriction moot. Claim 58 was added by a preliminary amendment mailed on June 6, 2001, but was not addressed in the oral restriction. It is believed that claim 58 is properly part of Group I. New claims 59-78 are also properly included with the Group I claims.

The Office Action notes that numerous references have been cited in the information disclosure statement, and takes the position that a large volume of the cited prior art is not material and may obscure a single material reference. As explained